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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/517,001
Filing Date: May 31, 2005
Appellant(s): AHONEN, PETRI

Andrew T. Hyman
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 1/16/2009 appealing from the Office action mailed 3/25/2008.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

20020087759	Toyoshima	7-2002

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Invoked - 35 USC § 112 6th

Claims 11, 17, and 18 have invoked 35 U.S.C. 112, sixth paragraph.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Toyoshima, (U.S. Publication 2002/0087759) hereinafter Toyoshima '759.

Referring to claim 1, Toyoshima '759 teaches, as claimed, a method comprising:

receiving update data (new code, see Paragraph 17, Lines 16-17) from a network unit (see Fig. 1, Transceiver Circuit 20) at a mobile device (see Fig. 1, Wireless Module 200) of the network (wireless or cellular network, see Fig. 1, Antenna 10), wherein a logic, external memory unit (peripheral device, see Paragraph 15, Line 14) is connected with the mobile device,

transferring the update data from the mobile device to the external memory unit (transferred to peripheral device for storage, see Paragraph 17, Lines 16-17),

storing the update data in the external memory unit of the mobile device (stored in the peripheral device, see Paragraph 17, Lines 16-17),

programming the stored update data (a code update process, see Paragraph 17, Line 10, and Fig. 2, Steps 220 to 260) in a permanent memory unit (loading the primary code to DRAM 90, see Paragraph 21, Line 8; Note, DRAM 90 and NAND Flash 80 are permanent memory units because unlike the peripheral device, they are not removable) of the mobile device, according to programming logics (see

Fig. 1, Microprocessor 70; Note, there is a programming logic to conduct update process) provided by the mobile device, and

updating a firmware (see Paragraph 17, Line 10, Fig. 2, and Fig. 3; Note, the primary code is a final firmware that is loaded and executed as a firmware in this wireless module) of a mobile device (a wireless telephone, see Paragraph 16, Line 7) according to the update data (see Fig. 3, Primary Mark 350).

As to claim 2, Toyoshima '759 teaches a method according to claim 1, wherein the method comprises a step of transmitting the update data (new code, see Paragraph 17, Lines 16-17) from the network unit (see Fig. 1, Transceiver Circuit 20) to the mobile device (see Fig. 1, Wireless Module 200) as a response to a certain function (receives a signal, see Paragraph 16, Lines 1-3) that triggers the transmission, said function being one of the following (Note, Toyoshima '759 teaches at least one of the following alternative functions):

choosing from a menu of the network unit by a user,

choosing from a menu of the mobile device by a user,

an appearing of new update data to the network unit (see Fig. 3, Release Date 340; Note, when new version of update data is available then network sends out the data on the release date), or

an outdating of the firmware of the mobile device.

As to claim 3, Toyoshima '759 teaches a method according to claim 1, wherein the logic, external memory unit (peripheral device, see Paragraph 15, Line 14) is connected to the mobile device (a wireless telephone, see Paragraph 16, Line 7) by means of an external memory bus (I/O interface, see Paragraph 15, Lines 13-15).

As to claim 4, Toyoshima '759 teaches a method according to claim 1, wherein the method comprises a step of transmitting the update data (new code, see Paragraph 17, Lines 16-17) by the mobile device (see Fig. 1, Wireless Module 200), where the update data is converted to be compatible (see Fig. 1, Baseband Signal Processor; Note, a signal converted to be compatible with digital format) with the memory unit (see Fig. 1, DRAM 90) and with the memory bus (see Fig. 1, a bus/connections between Micro Processor 70 and DRAM 90) to be connected thereto, after which the converted update data is transmitted to the external memory unit (peripheral device, see Paragraph 15, Line 14) along the memory bus.

As to claim 5, Toyoshima '759 teaches a method according to claim 1, wherein the method comprises a transmitting the update data (new code, see Paragraph 17, Lines 16-17) by a mobile device (see Fig. 1, Wireless Module 200), through which the update data is directly transmitted (see Paragraph 15, Line 14) further to the external memory bus (I/O interface, see Paragraph 15, Lines 13-15) of the mobile device along a memory bus.

As to claim 6, Toyoshima '759 teaches a method according to claim 1, wherein the method comprises programming the update data (new code, see Paragraph 17, Lines 16-17) stored in the external memory unit (peripheral device, see Paragraph 15, Line 14) in the mobile device (see Fig. 1, Wireless Module 200), when the mobile device is switched on for the next time (Note, updating occurs when system is switched on or enabled state).

As to claim 7, Toyoshima '759 teaches a method according to claim 1, wherein the method comprises a step of copying the programming logics (loading the primary code, see Paragraph 21, Lines 7-9) for programming the update data from an external memory unit (peripheral device, see Paragraph 15, Line 14) to the permanent memory unit (see Fig. 1, NAND Flash 80) of the mobile device prior to programming (see Paragraph 18, Lines 14-15) the update data.

As to claim 8, Toyoshima '759 teaches a method according to claim 1, wherein the method comprises a step of storing the programming logics (loading the primary code, see Paragraph 21, Lines 7-9) for updating the update data (new code, see Paragraph 17, Lines 16-17) from the permanent memory unit (see Fig. 1, NAND Flash 80) of the mobile device to a random access memory (see Fig. 1, DRAM 90) of the mobile device prior to programming the update data.

As to claim 9, Toyoshima '759 teaches an arrangement comprising:

an external memory unit (peripheral device, see Paragraph 15, Line 14) arranged to store an update data (new code, see Paragraph 17, Lines 16-17),

a connection interface (I/O interface, see Paragraph 15, Lines 13-15) arranged to transmit the update data from a network unit (see Fig. 1, Transceiver Circuit 20) to a mobile device (see Fig. 1, Wireless Module 200) and further to the external memory unit of the mobile device, and

a control unit (see Fig. 1, Microprocessor 70) arranged to program the stored update data to a permanent memory unit (see Fig. 1, NAND Flash 80) of the mobile device by means of a programming driver (a code update process, see Paragraph 17, Line 10, and Fig. 2, Steps 220 to 260) provided by the mobile device, and wherein the control unit is further arranged to update a firmware (see

Paragraph 17, Line 10, Fig. 2, and Fig. 3; Note, the primary code is a final firmware that is loaded and executed as a firmware in this wireless module) of the mobile device (a wireless telephone, see Paragraph 16, Line 7).

As to claims 10-13, they are directed to an arrangement/system to implement the method as set forth in claims 3, 4, 7, and 8 respectively. Therefore, they are rejected on the same basis as set forth hereinabove.

As to claims 14 and 15, they are directed to a mobile device implemented in the arrangement as set forth in claim 9. Therefore, they are rejected on the same basis as set forth hereinabove.

As to claims 17 and 18, they are directed to an arrangement/system implemented in the method as set forth in claim 1 and 3 respectively. Therefore, they are rejected on the same basis as set forth hereinabove.

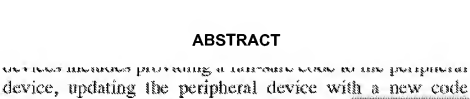
(10) Response to Argument

Appellant argues, the Toyoshima reference presents a wireless module for wirelessly updating code to a peripheral device (Toyoshima paragraph 5). In the process of Toyoshima, firmware or code of a peripheral device is updated, not firmware of the wireless module. The Office Action states at page 4 (last full paragraph) that "the

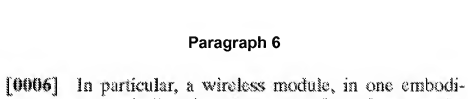
primary code is a final firmware that is loaded and executed as a firmware in this wireless module". However, the primary code of Toyoshima, which is loaded in the wireless module, is the primary code of the peripheral device (see Abstract and paragraph 6 of Toyoshima).

Examiner disagrees. The Abstract and the Paragraph 6 discloses that 'a primary code is for the operation of the peripheral device':

ABSTRACT


devices includes providing a fail-safe code to the peripheral device, updating the peripheral device with a new code utilizing the wireless module, and executing a primary code for operation of the peripheral device. Further, the wireless module may be provided to any number of peripheral devices compatible with the Memory Stick™ removable data storage media. The wireless module is removably

Paragraph 6

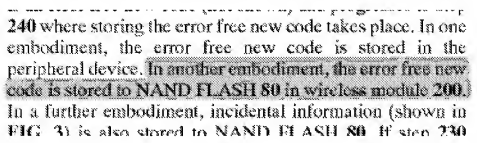

[0006] In particular, a wireless module, in one embodiment, has the similar size, shape, and form factor as the current Memory Stick™. Also, the wireless module allows for wireless communication with digital storage functionality. In one embodiment, a method of updating code includes providing a fail-safe code to a peripheral device, updating the peripheral device with a new code utilizing the wireless module, and executing a primary code for operation of the peripheral device.

Since, a primary code operates on the peripheral device; it is an operating system of the wireless module. A primary code is not excluded from operating other peripheral or hardware of the wireless module. For example, just because an operating system is for a peripheral does not means it is not also for a memory or a processor. Therefore, the primary code is properly construed as software/firmware of the wireless module.

Appellant argues, Toyoshima repeatedly states that the wireless module is used to update code to the peripheral device (e.g. see paragraph 17 of Toyoshima at first sentence, summary of the invention of Toyoshima at paragraph 5, and Abstract of Toyoshima) rather than vice versa as presently claimed. Therefore, the idea in Toyoshima is to have an external module for updating of a peripheral device, where the external module can store and execute a code update and also can act as a backup for an earlier version of the code of the peripheral device.

Examiner disagrees. Toyoshima discloses multiple embodiments of obvious variations. Obvious that it may be, Appellant appears to be only focused on an embodiment that does not quite fit the claimed invention of Instant Application. However, at least one of the embodiments of Toyoshima clearly anticipates the claimed invention as shown in Paragraph 17:

Paragraph 17


240 where storing the error free new code takes place. In one embodiment, the error free new code is stored in the peripheral device. In another embodiment, the error free new code is stored to NAND FLASH 80 in wireless module 200. In a further embodiment, incidental information (shown in FIG. 3) is also stored to NAND FLASH 80. If step 230

Appellant further argues, Applicant respectfully emphasizes that the steps in paragraph 17 of Toyoshima are illustrated in Figure 2 of Toyoshima. Figure 2 of Toyoshima is very clearly and succinctly described at Paragraph 11 of Toyoshima: "for updating code to a peripheral device utilizing the wireless module." This is the exact opposite of the present claimed invention, which is for "updating a firmware of a mobile device" using an external memory unit.

Examiner disagrees. Again, at least one of the embodiments of Toyoshima is not oppositely arranged version of the claimed invention of the Instant Application. One of the embodiments of Toyoshima exactly aligns with the present claimed invention. For instance, Toyoshima in Paragraph 18 discloses "updating a primary code (a firmware) of a NAND Flash of a wireless module (a mobile device),' using a peripheral device (an external memory unit):

Paragraph 18

[0018] Flow diagram **210** illustrates the conclusion to one embodiment of the method for updating code by marking a primary code (not shown) in a step **260**. In one embodiment, the fail-safe code is marked as the primary code and stored in NAND FLASH **80**. In another embodiment, the error free new code is marked as the primary code and stored in NAND FLASH **80** and the fail-safe code is un-marked as the primary code and also stored in NAND FLASH **80**. In a further embodiment, allowing selection of the primary code is provided such that even after the code update process, if a user detects some fatal operation errors when using the peripheral device or wireless module **200**, the user can manually switch the primary code to the fail-safe code or any other code version stored in NAND FLASH **80** until an improved code is available. The allowing selection of the primary code also allows a manufacturer or an provider to automatically switch the primary code to the fail-safe code or any other code version as well, through wireless communication with wireless module **200** and/or the peripheral device without the awareness or any operation of the user.

(11) Related Proceeding(s) Appendix

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Hyun Nam/

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